

Context Driven Model to Optimise Recreational Open Spaces in Residential Neighbourhoods

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1 ABSTRACT

People can feel affiliated with their cities through dealing with its elements and engaging in activities within its various spaces. Recreational open spaces (ROS) considered to be the essential element of vitality in human's daily life, known internationally as the right to recreational open spaces. As discussed by World Health Organization; recreational open spaces not only indicate the quality of life in any city, but also have a direct reflection on humans' mental and physical health. On the other hand, providing recreational open spaces is considered to represent the urban century's dilemma. This is due to the rapid increase of local population in cities. There is a severe deficit between the standard area and the available area of ROS. To provide the intended standard of ROS area, a valid urban policy which is compatible with the city's conditions should be formulated and followed. This research aims at a methodology for shaping an urban policy for the purpose of recreational open spaces in residential neighbourhoods. Typically following the key steps of this methodology should present an urban policy model ideologically driven from the condition of the city itself. This paper presents the complex mechanism of the ROS urban policy and how it should be correctly identified to formulate a valid urban policy model.

Keywords: neighbourhoods, context, public spaces, recreational open spaces, urban policy

2 INTRODUCTION

(Heckscher, 1977) states that "open space is associated with pleasure, with recreation, with human encounters and communal celebration, as it plays a significant role in renewing and stabilising the cities' social and economic base". Typically different types of activities take place in gardens, parks, and outdoor areas, Outdoor sports are typically stated to be more successful than others; nature activities must happen in the presence of nature; and outdoor break times are stated to enhance the employees' productivity. Consequently, the cities' open spaces are one of its necessary elements that instantly bond the modern city with its local citizens.

The World Health Organisation standardised a minimum 9 m² of open space per person. Located every 500 m, within an average of 12-min walking time. Cities face this deficit differently. Some cities recognised this challenge previously, and situate it currently in a specific urban policy process. Other cities recognised the urban challenge more recently and are trying to copy the pioneer cities' urban policies that proved their effectiveness in their respective cities. A third category of cities experiences the urban challenge in the absence of an urban policy model. Accordingly, following an urban policy model that responds to this challenge is crucial.

This paper studies the challenge of recreational open spaces (ROS) for urban policy. It proposes a theoretical method that could be used to generate an urban policy model for the provision of recreational open spaces.

3 RECREATIONAL OPEN SPACE (ROS)

ROS are those spaces where the recreational activities take place (active and passive urban recreation) regardless of whether the open spaces are softscape spaces or hardscape (WAKABA, 2016). Perry (1929) states "Open space, as a functional space comprises spaces used in a certain manner and for certain purpose, with a role in forming the city and providing the ecological conditions of healthy dwelling. Their roles in the housing zone are: spaces for communication, leisure time and recreation, varied usage spaces such as the integral spaces with the city content, preservation of the environment"

Other literature argues that the main role of open space in a residential complex is to create a balance between construction and human density, providing appropriate levels of a necessary framework which allows some activities (Mohammadzadeh, 2011).

3.1 ROS values

The provision of ROS contributes to several benefits to the city and its users. WAKABA (2016) concluded four main values for ROS:

- Environmental and Ecological value where ROS brings important environmental benefits to urban areas such as: the abatement of the urban heat island effect, an improvement of the air quality and the absorption of atmospheric pollutants, natural habitat protection
- Social Value as these spaces shape the cultural identity of an area, contribute to its unique character and build a sense of place for local communities, bring communities together, provide meeting places and foster social ties which have been disappearing in many neighbourhoods, cities and towns. The locals take some pride in the area they live in.
- Economic value as investors are attracted to locations offering well designed and well managed public spaces which in turn attract highly skilled employees and services. Their influence ranges from raising property values, increasing the business turnover for retailers, creating employment opportunities, contributing to the regeneration of the inner city neighbourhood, and promoting tourism.
- Aesthetic value as ROS give the users a pleasant break; a chance to escape the usual urban setting. Thus, people feel good being in these spaces and also feel refreshed as they appreciate the beauty of these places. This fosters an attachment to the spaces by the users.

3.2 Characteristics of recreational open spaces

General qualitative concepts were highlighted by scholars identifying ROS characteristics as the proximity, accessibility, knowledge that they may be used at any time of day and their attractiveness (Jacobs, 1961, WAKABA, 2016, W. Whyte, 1980, L. Bravo, 2013, N. Abelaziz, 2017). Other scholars are more concerned about the ROS location and their serving citizens. WAKABA (2016) states that ROS of the residential neighborhood should serve 4500-8000 residents, and their walking distance is 250-300m. Also, WHO (1965) standardised an average of 12-minutes walking time and its location to be isolated from the motor traffic every 500 m. (Petar Mitković, 2004), N. Abelaziz (2017) concluded several functions that may take place at ROS in a residential neighbourhood: sitting, resting and meditation, elders' outdoor sports, basketball courts, climbing structures, children playground, small event space, meeting and socialising space, educational spaces so that children can gain a better understanding of nature.

3.3 Ownership and the provision dilemma

The provision of public urban spaces usually is the responsibility of the government. On the other hand, cities' governments suffer from the increase of responsibilities and the limitation of resources. Nevertheless, the rapid increase of the population prioritised other demands such as the provision of housing and water. and cities responded differently. Scholars unpacked public openspaces into three parts:

- Ownership: Studies and practices of several cities confirm that public sector ownership is not the only scenario cities may follow. Privatisation is another method to remedy the deficiency of spaces. Castello (2013) calls them diluting the boundaries between public sector and private sector which clarifies the contemporary view that tends to be more tolerant in this regard.
- Sponsorship: open space is not only described as void but also as a positive void that performs its role positively. In order to create and sustain vitality, open spaces demand sponsorship through the life cycle of the open space; design phase, construction phase and post erection phase. Spaces may be monitored and sponsored by the public sector, private sector or the public themselves.
- Use: whether the public has access to the space or not (Carmona et al, 2012) does not identify an ideal public space. But instead it offers variable, competing perspectives, which therefore raise the question of "for whom" a space might be more or less public. In other words, if people (users) think that a space is public, then it is a public space. Another concern of public space is whether the space is actively used and shared by different individuals and groups in terms of age and gender.

Consequently, open spaces may be owned and sponsored by the private sector but publicly used or public in terms of ownership, sponsorship and use or a private space in terms of use and ownership but sponsored by the public sector.

4 URBAN POLICY

4.1 City Challenges

” cities faced and will always face challenges” (Claire Edwards, Rob Imrie, 2015)

Tracing one of the historical city challenges, the provision of water, Roman engineers designed and constructed aqueducts. Roman engineers constructed a complex network of aqueducts and before that the Greeks built sophisticated sewage systems in their cities, such as Knossos in Crete. Nevertheless, the Egyptian Sadd E; Kafea in wadi Garawa built around 650 BC for flood control is considered the oldest dam of such size (110m) x14m (Agaiby et al, 2013). Thus, cities have and always will face challenges and provided urban solutions to overcome them. Claire Edwards, Rob Imrie (2015) agreed that time provokes different city challenges and stated that the current reasons are massive increase of population and the consequences of new technologies. Paul Cheshire, Max Nathan, Henry G.Overman (2014) also confirmed that technology drives changes to cities periodically.

4.2 Definitions

“Policy“ as defined by the Oxford Dictionary is a plan of action agreed or chosen by any party The Cambridge Dictionary defines it as a course of actions adopted or proposed by an organisation or individual. Adding the word urban as described by Claire Edwards, Rob Imrie (2015) is the scope of the plan of action, in other words, all that corresponds to the city’s buildings, forms, and infrastructure. As defined by the Oxford Dictionary “Method“ is used to describe a well-organised systematic action. Thus, urban policy is a planned method for overcoming a city challenge. It is important to highlight that urban policy is not restricted to a governmental plan and scholars debate other creative responsible parties for urban policies. However, the generic use of the word is to describe the governmental plan (Glaeser, 2011).

Snook (2021) highlights that cities are different and according to these differences, urban policies are shaped uniquely for each city. Defining the city’s resources form its characteristics and describe its limitations. In conclusion, urban policy is a planned method which formalises the available city’s resources in order to overcome a specific city challenge.

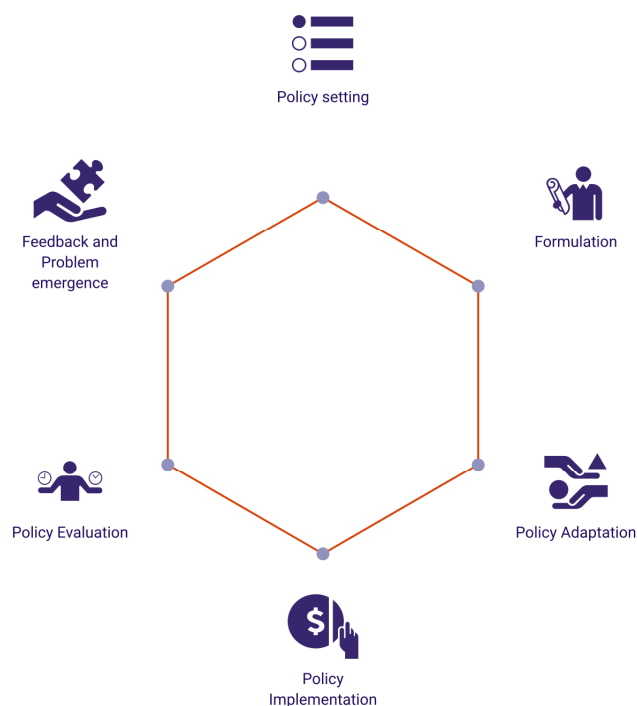


Fig. 1: policy process stages, source: researcher.

4.3 Policy Process

To reach a successful policy that fits the context, cities must go through several stages. They start with setting the agenda that prioritises the challenge. Then the actual start of the process is the formulation of the policy. This stage divides into two phases: firstly, designing different models and choosing the best option, secondly, formulating the coding regulation for the chosen model. The third stage is the adoption of the policy by the different city departments and devising execution instruments. This stage transforms the model into a policy. The implementation of the policy is the stage where the policy should solve the challenge partially or totally which should go through several periodical evaluations. The evaluation stage should always reflect on the policy agenda setting accordingly. The whole policy process serves as a cycle that repeats its stages. The focus of this paper is to elaborate a model at the policy formulation stage.

4.4 Policy dimensions

Despite the difference of urban challenges, scholars found common dimensions and layered solutions layered to these dimensions. Consequently, should these strongly agreed dimensions be approved for any type of urban policy, scholars would have to study those dimensions (the components of the urban policy) to reach an integral urban policy. The following paragraphs introduce, define and present the references for the dimensions of the urban policy (Table 1).

Reference	Physical dimension	Social dimension	Economical dimension	Political Dimension	Managerial Dimension	Environmental Dimension	Cultural dimension
(Paul Cheshire, et al, 2014)	Strongly agreed (built form)	agreed	Strongly agreed (market forces)	agreed	Not mentioned	Not mentioned	Not mentioned
(Claire Edwards, Rob Imrie, 2015)	Strongly Agreed (places)	Strongly agreed	Strongly agreed	Strongly agreed	Not mentioned	Strongly agreed (Ecological sustainability)	agreed
(R, 1993)	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed	Not mentioned	Not mentioned
(J. Clark)	Strongly agreed	Strongly agreed	Not mentioned	Not mentioned	Not mentioned	Not mentioned	Not mentioned
(Batty & Hutcherson, 1980)	Strongly agreed	Not mentioned	Not mentioned	Strongly agreed	Strongly agreed	Not mentioned	Not mentioned
(Jacobs, 1961)	Strongly agreed	Strongly agreed	agreed	Not mentioned	Strongly agreed	Not mentioned	agreed
(Parkin, 2014)	Strongly agrees	Strongly agrees	Strongly agrees	Strongly agrees	agrees	Not mentioned	Not mentioned

Table 1: The agreed dimensions of urban policy by different scholars, source: researcher.

4.4.1 Physical dimension:

Cities' physical dimension is their materialistic form. Urban scholars have much focused on this dimension. Different studies strongly agreed (R, 1993, Dolowitz & March, 1993, Claire Edwards, Rob Imrie, 2015) on the physical dimension which they consider to tackle the challenge's materialistic elements (Batty & Hutcherson, 1980, Jacobs, 1961).

4.4.2 Social dimension:

Jane Jacobs as described by Paul Cheshire, Max Nathan, Henry Gorman (2014) is the prime sociologist woman who first bonded urban policy and sociology. She described the city as a complex organism that should be organised through dealing with its citizens and spaces simultaneously to remedy the city's problems. Dolowitz & March (1993) state that the problem of urban policy transfer lies in the socio-cultural differences; in other words, the society of the city is a crucial factor for the acceptance or the refusal of the urban policy. The social dimension is concerned with the values, norms and roles of the society, emanating from the cultural dimension of the society which differentiates one group from another.

4.4.3 Economic dimension

The economic dimension, which tackles the economic functioning of the challenge, (Paul Cheshire, Max Nathan, Henry Gorman, 2014) claims that despite the importance of the economic dimension at the urban policy formulation, scholars lack economical insights. Economical understandings improve urban policy design and delivery. Strong market forces highlight currently the importance of paying attention to the outcomes for the people as well as the places.

4.4.4 Political dimension

The political dimension is according to Collins Dictionary the way power is achieved and used in a country. According to Christoph Knill and Jale Tosun (2008) the political dimension is where the power lies which strongly relates to any urban policy in terms of political organisation, political laws and regulations, role of government and political ideology of the city. Dolotwiz & March (1993) considered that the political dimension strongly relates to economic and social dimensions as it seeks the community's good subject to economical affordance.

4.4.5 Managerial dimension

Management is the planning, organising, leading and controlling aspect of urban policy (M Carmona et al, 2008). According to G Chase et al (1983) it is the guarantee of any urban policy to sustain and evolve. Many beneficial urban policies that lacked the managerial aspects lost their chance.. Chase also clarifies that the managerial dimension is the process that turns policy into practice. Urban policies could remain statements or they could arise as practical solutions in the political and managerial dimension. Batty & Hutcherson, (1980), R, (1993), G Chase et al, (1983) and Jacobs (1961) strongly agree on the link between urban policy, physical dimension and political dimension.

In conclusion, scholars strongly agree that physical dimension is the most important dimension in urban policy. Several scholars also agree on the economic and social dimension, while the political and management dimensions are given priority as they relate to the dimensions prior to new urban policy. The cultural dimension could be included in the social dimension (socio-cultural) dimension or it could be studied separately.

5 LINKING URBAN POLICY WITH ROS: A METHOD FOR DEVELOPING A CONTEXT DRIVEN MODEL

Each chosen dimension has several parameters which are identified according to the given challenge. They contribute to the identification of resources and limitations of each city as a basis for alternatives. A context driven model should be based on the specific resources and limitations of each city. The provision of recreational open spaces is the challenge adopted by this paper, aiming to define its parameters and alternatives. Determining alternatives for each parameter leads to different models suitable for the city's context.

5.1 Parameters of ROS urban policy

5.1.1 Spatial parameter

The physical dimension relates to the ROS challenge by means of the spatial parameter of the city. This parameter is defined as spaces of the city. R.Krier (1979) categorises urban spaces as spaces with a positive role in the city and among other existing spaces, regardless of their other characteristics, such as their area, ownership, etc. Spaces that have no role in cities, are the focus of many theorists as they are considered to be the first step towards emptying spaces (Council, 2015). Theorists adopted the idea that those spaces can be upgraded to positive open spaces. Spaces that have lost or have no role are the type of spaces this paper is adopting. (W. Whyte (1980), L. Bravo (2013), N. Abelaziz (2017) clarify that those spaces are considered one of the city's assets; properties that can be efficiently utilised and returned to use within a short time. In conclusion, the spatial parameter is available unutilised spaces of a city.

Spatial Alternatives:

Three main characteristic should be identified to drive a suitable model: area, ownership and location in the neighbourhood (Council, 2015), (Borough, 2016). The paper categories the spaces firstly according to scale (Table2): small areas up to 500m² as pockets and mini pockets, medium size up to 1000 m² as squares, gardens and plazas, large size greater than 10,000 m² as parks or promenades. Some areas can be located between small and medium distancing (500m²-1000m²) while others are found between the margin line of medium and large (5,000-10,000m²) (W. Whyte, 1980, N. Abelaziz, 2017. Sitte, 1889. Heckscher, 1913, Mathew Carmona, Steve Tiesdell, Tim Heath, Taner OC, 2003). Quantitatively, the area is an indicator of its the potential affordance. Qualitatively, the area is also an indicator of the function selection. The location of space is considered its second characteristic. WHO (1965) stated that the location of the space is a primary

characteristic that is used as an indicator of the service radius. Another fundamental characteristic is the ownership of the space (public, private, shared). Each city should examine its affordable spaces' in terms of their areas, ownership and location.

spatial parameter data					
Space alternative	Space num.	Area	Location	Ownership	
small scale					
small-medium scale					
medium scale					
medium-large scale					
large scale					
Major space alternative	Total number	Total area	From the centre	The major ownership	

Table 2: the data needed to identify the spatial parameter, source: researcher.

5.1.2 Financial parameter

The economic dimension has several parameters relates to different urban challenges. Gallent, Filion, & Gurrnan (2021), Parkin (2014) state that financial capital is one parameter of the urban economics that plays an important role in enabling any development. Financial capital is money, credit, and other forms of funding that is used to achieve a target. Financing the development project for any city is a main constraint, depending on the support of government's direct fund hardly affordable (Paul Cheshire, Max Nathan, Henry Goverman, 2014). Nevertheless, guaranteeing and well managing funds describes the existence of the solution on the physical level. Several beneficial urban policies didn't exist due to the demand of non-existing grant funds. APM (2021) states that depending on several funding sources is favorable for any project. Consequently, it is important to define the existing and the limiting funding resources of the neighborhood in order to shape its suitable model. Innovative funding alternatives evolved in several cities, such as London, New York, Amsterdam and others (R, 1993) due to the uniqueness of economic factors in every city. The paper grouped the funding alternatives according to the funding sources as four alternatives that will be discussed next.

Financial alternatives:

Finance parameter data			
Financing alternatives	Method	Name of the parties	Scale of fund
Basic public finance	Example; taxes		
Private sector			
Organizations			
Donations			
Major available alternative	Total available method	Total involved parties	Total fund

Table 3: The data needed for identifying finance resources, source: researcher.

Different financing options were introduced over time in order to obtain and structure the money needed to provide recreational open space. Firstly, Lindfield, Michael, Teipelke, Renard (2018) describe basic public finance which depends directly on the government sector. This option could come from different tax collections, building permit fees, public utility tariffs. Secondly, the private sector alternative depends on government supervision but structuring the money depends on the private sector. This alternative developed differently over time, due to cities guaranteeing various benefits at different levels. The third alternative is organisations. National and international organisations may provide the money for the provision of open spaces. Several NGOs which adopt crucial interests, such as climate mitigation problems, go-green strategy and other related ideologies are considered as financing source for their provision. Global organisations which have adopted international agendas for sustainable development have established funds that provide concessional loans and technical assessment grants to projects that address at least one of their focal areas (biodiversity, international waters, land degradation, chemicals and waste, and climate change mitigation, or cross-cutting issues). Multi-lateral development banks provide loans at lower interest rates and/or longer repayment periods, commonly available in the local capital market, thus making debt easier than at standard market prices due to public welfare terms. In most cases, such concessional loans require a guarantee (by a national government), which will usually pass on the loan money either as debt and/or partial grant to city

governments. The last alternative are donations; this alternative can help projects at a small scale or provide last mile finance steps. Crowdfunding may also be an example of donation, for individuals of particular interest, or for social benefits to a neighborhood with a symbolic return.

5.1.3 Parties parameter

Political dimension relates to urban policy in many ways that differ from one challenge to another. Two major parameters were studied to attach a political dimension to ROS. The first is the general mechanism of urban policy, the method of handling the resources of the neighbourhood, meaning the organisation and operational system of the policy; how parties work together, how resources are managed. The mechanism of ROS do not only relate to the resource but also the time and scheduling which transform the ROS policy into a strategy. The parties are the second major parameter. Some theorists study the two parameters separately while others merged the two parameters. There is a difference between the parties and the system itself; the key parties represent the participants while the system is the operational system of those participants. The paper separates the two parameters: that of the parties and that of the mechanism. G. Chase et al (1983), Claire Edwards, Rob Imrie (2015), Dolotwiz & March (1993) find that there is a difference between the key parties and the actors in the policy process. Through the different stages of the policy different actors have certain jobs during agenda setting, policy formulation, policy implementation and policy evaluation. Those jobs may change and disappear during the changing policy stages, while the key policy parties are the participants who assign and manage those actors. Policy actors may be referred to as policy key parties. For example, the executives are the policy actor while the government is the key party of the policy who assigned the executives to do a certain job, besides other legislators, judiciaries and administrators.

The set of actors that adopt the policy are the key parties of the urban policy to deal with this challenge. This parameter defines the evolved parties that will adopt and operate the urban policy. This parameter is undoubtedly entwined with the finance parameter. On one hand, the finance parameter includes the crucial parties that finance the policy, on the other hand, ROS policy has crucial roles other than financing (G. Chase et al, 1983). The parties' parameter does not only embrace the financial source parties but extends to parties responsible for the key roles.

Parties Alternatives

According to Christoph Knill & Jale Tosun (2008) and Ddolotwiz & March (1993) the key parties could be grouped as follows:

- Government, understood as the public sector: The public sector refers to institutions, organisations, and companies where the government is the highest shareholder. These organisations are controlled, operated, and managed by the government. Their aim is the citizens' quality of life (in Egypt: gehaz tanseek alhadary)
- Institution, organisation: a legal entity organised and operated for a collective, public or social benefit, in contrast to an entity that operates as a business aiming to generate a profit for its owners. Nonprofit organisations are accountable to the donors, founders, volunteers, programme recipients, and the public community (for example, World Health Organisation)
- Political parties: individuals who favour community individuals in order to seek governmental power, their aim is the governmental power
- Investors, market referred to as the private sector: The private sector refers to organisations and institutions owned by private individuals. The private sector is controlled, operated, and managed by private companies and their higher aim is investment finance (for example, investor of real estate as a person or an organisation)
- Community as interest group: Communities exist around particular interests. They comprise any association of individuals or organisations, usually formally organised, that, on the basis of one or more shared concerns, attempt to influence policy in their favour. All interest groups share a desire to affect government to benefit themselves or their causes which represent a segment of society, but whose primary purpose is non-economic and usually focused on promoting a particular cause or value not specific to one area but to the interest as a whole. Their motive is their cause.

- Community as place: A community is a particular place or neighbourhood related to a group of people who co-exist within geographical boundaries. These people do not necessarily share interests but they inhabit the same area. They are referred to as individuals with no specific activity, as inhabitants or users with no particular moto.
- Community organisation: Inhabitants of a neighbourhood may form a resident association to represent shared concerns about their area. Their motto is the area concern.

Parties parameter data		
Parties Alternatives	Name	Responsibilities
Government		
Organization		
Political parties		
Investors		
Community and interest group		
Community organizations		
Major and minor involved parties	Total number of parties	

Table 4: the data needed to identify the parties parameter, source: researcher.

5.1.4 Morality parameter

The term moralisation was introduced by psychologist Paul Rozin in the late 1990s to describe the process by which people's preferences are transformed into values. The act in which a certain behaviour, bad behaviour is not accepted by general people, while other behaviour is considered acceptable to a certain group of people. Those groups of people are considered to have a certain value not just a preference that all of them accept for several reasons. Moralisation is fundamental for politicians in the past and now (Claire Edwards, Rob Imrie, 2015). Throughout history, cities used morals to gather people around them to believe them and credit them officially. Since charity and volunteering is a moral value, responsibility for the city is a value, exclusiveness is a value, healthy life style is a value, equality is a value. Theorists studied the relation between those values and place (Mathew Carmona, Steve Tiesdell, Tim Heath, Taner OC, 2003, W. Whyte, 1980, Jacobs, 1961). They highlighted that the moral parameter is the intangible preference that rises from the socio-cultural dimension of a neighbourhood, the values and believes of its residents. These values will link the residents to the ROS as they offer a place for practicing their common values. Each neighbourhood's residences are known for a certain moral. It could be defined as "the values that the space holds". ROS are not only built on its users' values but they also strengthen and level up other values as they contribute to the provision of the ROS. Thus morals are a resource that should be defined and managed to formulate the adequate ROS policy that fits society. This parameter guarantees the support of the ROS users through acknowledging their values. Nevertheless, it also builds higher positive values, such as responsibility, charity, goodness and welfare.

Morality Alternatives:

A moral parameter at the urban scale means the values that a space generates for its users and the values that the space accepts or considers to be wrong, even if the rules accept it. The moralisation parameter has a process, stated by Rozzen (1999), and it takes place at different scales. Values are numerous and different from one society to another. This parameter necessitates the selection of a value most common and known to the society that will contribute to the provision of ROS in this city. For example, German society cherishes self-responsibility. Gated community spaces hold values of segregation for a certain social level. The values of the users of urban spaces of the city develop, positively or negatively, a process that happens gradually and with intension. Values can be grouped into four main ensembles. The first is individualism; which garners individual values, such as responsibility, happiness, positivism, self-building. The second is pluralism or socialism; which relates individual values to others, such as accepting others, considering others, time commitment. The third are citizen and place values, which contain the values that link the individual to the city and to place, such as cleanness, volunteering, responsibility to the city and public services. Values that relate to religion and cultural traditions should also be identified and cherished.

Morality parameter data		
Morality alternative	present	needed
Individualism		
Pluralism		
Citizenship		
	Total number of morals	Total number of the needed morals

Table 5: the data needed for identification of morality parameter.

5.1.5 Control parameter

Carmona et al, (2008) highlighted the importance of guaranteeing the quality of public spaces, assuring that the quality of public space is achieved by managing different parts of space in termd of coordinating responsibilities, controlling the physical environment; approach to maintenance, in addition to controlling user behaviour and safety. This explains the attempt to define methods of controlling space and user behaviour in order to select the appropriate control alternative for the ROS model. Bostrom, Bravell, Lundgren, & Bjorklund (June 17, 2013) and D. Carro, S. Valera, T. Vidal, (2008) find three major sources of insecurity: environmental factors such as lighting, cleanliness or presence of “uncivil” behaviours; the social construct of a place as safe or unsafe; and the ability of the individual to cope with these variables. According to Kohlberg (Figure 3), people behave according to their education, cultural backgrounds, community, family, religion, ethics and values. Their life experience shapes their overall background. Kohlberg, proposes a model that packages people behaviour into a reasoning model. Baumeister & Tierney (2011), Baumeister, Vohs, & Tice (2007) and several other theorists followed this ladder to define an adequate model to control behaviours in public spaces. Consequently, grouping these models are alternatives to dealing with different users at ROS. Mathew Carmona, Steve Tiesdell, Tim Heath, Taner OC (2003) grouped the urban space into four parts of buildings, landscape (hard and soft), infrastructure and uses. His study proposes that control of the physical dimension of urban space should be scheduled and planned to cover the designed urban elements. It is important to highlight that the ‘kit of parts’ was only one part of Carmona’s study/ The other two parts were context for actions and qualities to study the character of the urban space. RO Noak (2018) established alternatives that link the kit of parts devised by Carmona and maintenance duration to the budget and the user density of the place.

Control Alternatives:

In the end ROS are public spaces that welcome people from all walks of life. Assigning spaces for users of ROS to do/ don’t actions, cannot be controlled in a single way, due to the different backgrounds of the users. According to Kohlberg, dealing with users in terms of do and don’t should be done differently. Users should be made aware of simple rules at stage one and certain circumstances if they do not obey them., Stage two should provide society supporters who would give social norms encouragement and applaud the desired action by the society. At stage three people should try to understand the reasons why they do not comply with social rules. Instead of controlling people actions directly spaces may be controlled by rules secured by design (SBD, Loukaitou-Sideris and Banerjee, 1998: 183–5. Instead of heavy hand control soft hand control may achieve better results using closed circuit television and pacification alternatives.

Control parameter data		
behavioral control	Method	Name
Soft hand		
Heavy hand		
Operational control	Frequency	Model
Enclosing elements		
Elements within enclosure		

Table 6: the data needed to identify the control parameter, source: researcher.

6 CONCLUSION

ROS are those spaces where the recreational activities take place, one of their roles in residential neighbourhoods is to create a balance between construction and human density. The provision of ROS has several benefits fpor the city and its users: environmental and ecological value, social value, economic value, aesthetic value. ROS characteristics are identified as proximity, accessibility, knowledge that they may be used at any time of day and its attractiveness. Other charcteristics are identified as location and serving

citizens. ROS may be owned and sponsored by the private sector but still considered as public space because it is used publicly. Urban policy is a planned method, which was formalised due to available city resources to overcome a specific city challenge. To reach a successful policy that fits the context, cities have to work through several stages. Formulating several models guarantees choosing the best option to solve the challenges according to the city context.

Although urban challenges differ widely, scholars identified common dimensions and that solutions were layered according to these dimensions. Scholars agree strongly that the physical dimension is the most important one. Several also agree on the economic and social dimension but attribute priority to the political and management dimensions as they relate to the physical and social dimensions. The precise parameter of each dimension is identified according to the challenge intended to be overcome. Regarding the ROS challenge, spatial, finance, morality, parties and control are the parameters of the five dimensions respectively. Three main characteristics are identified to drive a suitable model for ROS: area, ownership and location in the neighborhood. The paper categorises the recreational spaces according to size: small areas up to 500m² as pockets and mini pockets, medium size up to 1000 m² as squares, gardens and plazas, large size greater than 10,000 m² as parks or promenades. Different financing options were introduced over time in order to obtain and structure the money needed to provide the recreational open space: basic public finance organisations, the private sector and donations. There is a difference between the key parties and the actors in the policy process. The parties alternatives for a model are Government referred as the public sector, Institution/organization, political parties, Community as interest group, Community sector/organization. A moral parameter on the scale of urban means the values that a space generates to its users and the values that the space accepts or considers to be wrong even if the rules accepts it. Values can be grouped in four main packages. The first is individualism; which packs the individual values as responsibility, happiness, positivism, self-building. The second is pluralism or socialism; which packs the individual values with others as accepting others, considering others, time commitment. The third is citizen and place values, which contains the values that link the individual with the city and place as cleanness, volunteering, responsibility to the city and public services. Values that relates to religion and cultural traditions also should be identified and cherished. the quality of public space is achieved by controlling the physical environment; maintenance approach in addition to controlling user's different behaviors.

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